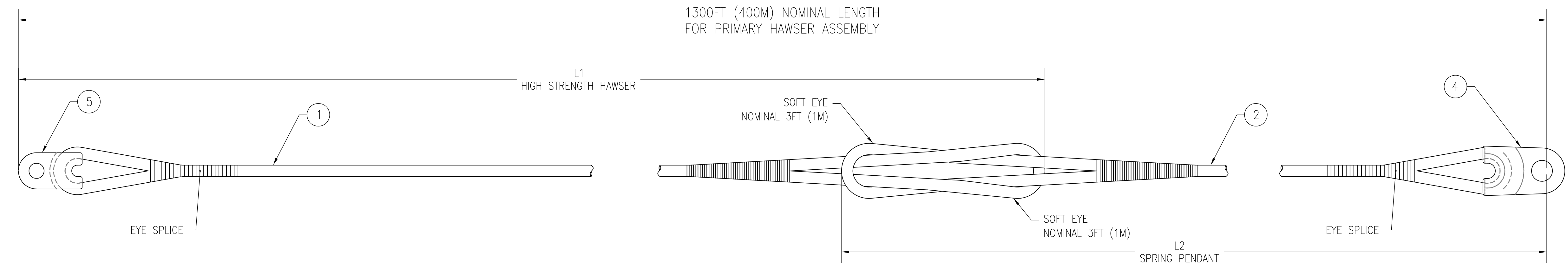
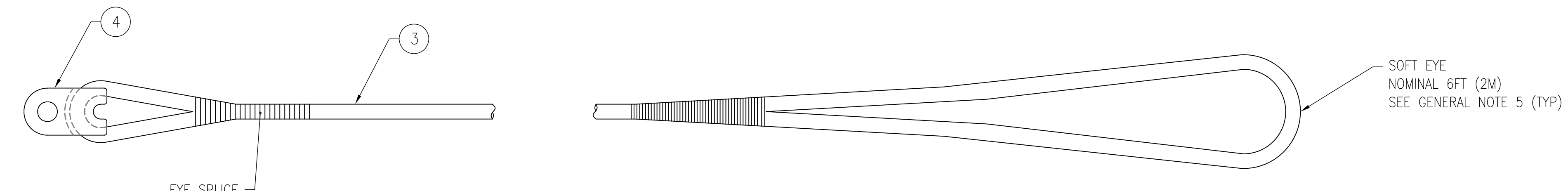


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-	1	1	EA	SAMSON QUANTUM-12 GREEN OR EQUAL	1 3/8" DIA HIGH STRENGTH CLASS II, 1300(± 10FT) CUT LENGTH, SEE GEN NOTE 2	HMPE CORDAGE	-																																																																																																																							
-	2	1	EA	SAMSON HTP-12 OR EQUAL	2 1/4" DIA HIGH STRENGTH CLASS I, 75(± 5FT) CUT LENGTH, SEE GEN NOTE 4	POLYESTER CORDAGE																																																																																																																								
-	3	1	EA	SAMSON HTP-12 OR EQUAL	2 1/4" DIA HIGH STRENGTH CLASS I, 30(± 1FT) CUT LENGTH, SEE GEN NOTE 4	POLYESTER CORDAGE																																																																																																																								
-	4	2	EA	-	THIMBLE, TOWING, SIZE 6-7, REF 1	GALV CAST STL																																																																																																																								
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-	6	1	EA	SAMSON QUANTUM-12 ORANGE OR EQUAL	1 1/8" DIA HIGH STRENGTH CLASS II, 650 FT (±10 FT) CUT LENGTH, SEE GEN NOTE 3	HMPE CORDAGE																																																																																																																								
-	7	1	EA	SAMSON HTP-12 OR EQUAL	1 3/4" DIA HIGH STRENGTH CLASS I, 60 FT (±2 FT) CUT LENGTH, SEE GEN NOTE 4	POLYESTER CORDAGE																																																																																																																								
-	8	1	EA	SAMSON HTP-12 OR EQUAL	1 3/4" DIA HIGH STRENGTH CLASS I, 30 FT (±1 FT) CUT LENGTH, SEE GEN NOTE 4	POLYESTER CORDAGE																																																																																																																								
						<p>1. THIS DRAWING WAS CREATED IN ACCORDANCE WITH SFLC ACTIVITY NO. 28914, "ESD DRAWING UPDATE WMSL TOWING HAWSERS" TO PROVIDE HIGH STRENGTH POLYETHYLENE (CLASS II) PRIMARY AND SECONDARY TOWING HAWSERS WITH SPRING PENDANTS FOR 418 WMSL CLASS CUTTERS. THE COMPLETE HAWSER INCLUDES BOTH THE HIGH STRENGTH SECTION AND SPRING PENDANT COW HITCHED TOGETHER.</p> <p>2. THE PRIMARY HAWSER ASSEMBLY SHALL NOT EXCEED A RATED BREAKING STRENGTH (RBS) OF 149,800 LBS.</p> <p>3. THE SECONDARY HAWSER ASSEMBLY SHALL NOT EXCEED A RATED BREAKING STRENGTH (RBS) OF 96,300 LBS.</p> <p>4. THE SPRING PENDANT RATED BREAKING STRENGTH IS NOMINALLY 125% OF THE RBS OF THE ASSOCIATED HAWSER</p> <p>5. ALL EYES SHALL BE PROTECTED BY CHAFE MATERIAL, DYNALENE OR EQUAL FOR QUANTUM, CORDURA OR EQUAL FOR HTP-12.</p> <p>6. THE NOMINAL FINISHED LENGTH OF THE PRIMARY HAWSER ASSEMBLY (L1 + L2) IS 400 METERS. THE NOMINAL FINISHED LENGTH OF THE SECONDARY HAWSER ASSEMBLY (L1 + L2) IS 200 METERS. HAWSER LENGTHS SPECIFIED IN THE MATERIAL LIST ON SHT 2 ARE NOMINAL CUT LENGTHS WHICH INCLUDE ALLOWANCES FOR SPLICING.</p> <p>7. THIMBLES SHALL BE IN ACCORDANCE WITH NAVSEA DRAWING 803-6397321 (REF 1).</p> <p>8. THE ACCESSORY SOFT EYE PENDANT IS ATTACHED TO THE HAWSER WITH NATO LINK AND/OR DETACHABLE LINK ONLY WHEN A SOFT EYE TERMINATION IS REQUIRED.</p> <p>9. COW HITCH: PASS HAWSER SOFT EYE THROUGH PENDANT SOFT EYE, PASS SPRING PENDANT, SHACKLE THIMBLE END FIRST, THROUGH THE HAWSER EYE AND TIGHTEN.</p> <p>10. ALL SPLICES SHALL BE IN ACCORDANCE WITH ROPE MANUFACTURER'S INSTRUCTIONS.</p> <p>11. IN THE MATERIALS LIST PC# 1-5 MAKE UP THE PRIMARY HAWSER. PC# 5-8 MAKE UP THE SECONDARY HAWSER.</p>																																																																																																																								
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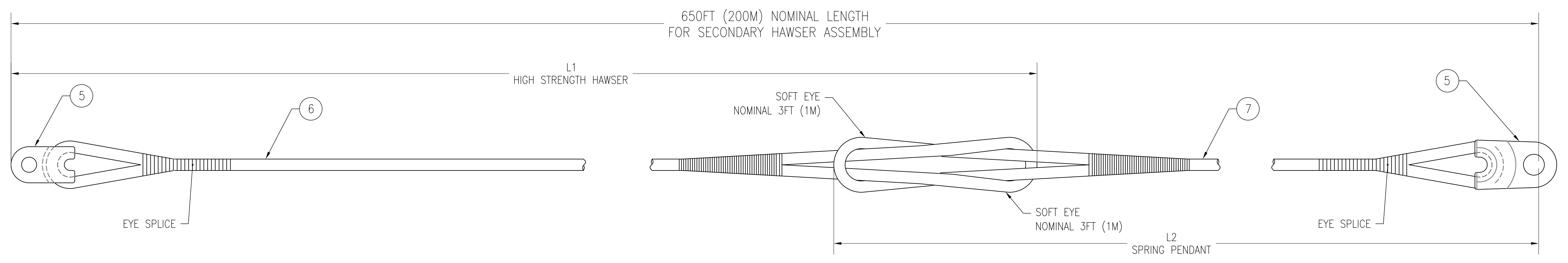
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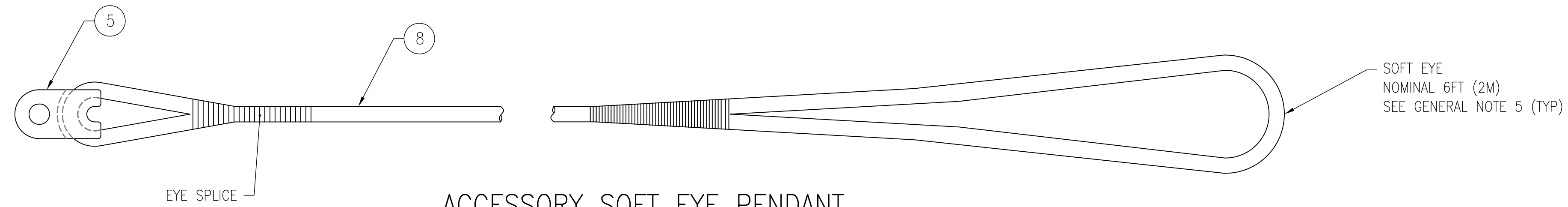
TOWING HAWSER (SHACKLE THIMBLE TO SHACKLE THIMBLE)
FOR PRIMARY HAWSER ASSEMBLY



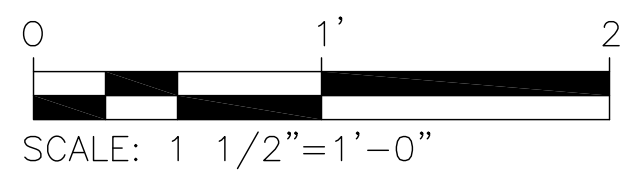
ACCESSORY SOFT EYE PENDANT
FOR PRIMARY HAWSER ASSEMBLY



TOWING HAWSER (SHACKLE THIMBLE TO SHACKLE THIMBLE)
FOR SECONDARY HAWSER ASSEMBLY



ACCESSORY SOFT EYE PENDANT
FOR SECONDARY HAWSER ASSEMBLY



HIGH STRENGTH TOWING HAWSERS HAWSER ASSEMBLY			
SIZE D	CAGE CODE 81340	USCG DRAWING NO. 418A-WMSL-582-002	REV --
SCALE: 1 1/2"=1'-0"			SHEET: 2

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